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# POWER FOR ALL FACT SHEET

## Off-grid PayGo: Unlocking Affordable Energy Access and Financial Inclusion in SSA

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**POWER  
FOR  
ALL**

**25-30**

MILLION PEOPLE GAINED  
ENERGY ACCESS THROUGH  
PAYGO WORLDWIDE

**200**

MILLION UNSERVED  
PEOPLE IN SSA WOULD NOT  
GAIN ACCESS TO A SMALL  
SOLAR KIT WITHOUT  
PAYGO

**40%**

OF TOTAL OFF-GRID SOLAR  
LIGHTING SALES THROUGH  
PAYGO IN SSA

Between 2015 and 2020, between 25 and 30 million people gained energy access through PayGo (short for pay-as-you-go) worldwide. It is a business model that allows customers, primarily living under the poverty line, to purchase solar home systems and other assets (like appliances) through an initial down payment and subsequent recurrent installments (usually from a mobile phone)<sup>1</sup>. In this way, bottom-of-the-pyramid households can overcome the high up-front costs of solar assets and access clean and reliable electricity. The PayGo model has proven so successful that it has been adopted in other industries beyond solar PV, such as agriculture, telecoms and insurance), and is growing fast.

### **PayGo drives energy access:**

- » Less than half of the population of Sub Saharan Africa has access to electricity, with a large gap between rural and urban shares.<sup>2</sup> The traditional utility model has failed to increase connections, especially in small and/or remote villages where grid extension is costly, and decentralized renewables have stepped in as the fastest and most effective way to end energy poverty.
- » Currently, over 40% of all sales of off-grid solar lighting products in SSA are conducted through PayGo, reaching almost 50% in Kenya and 65% in Rwanda. The cash-only nature of some economies, like Ethiopia, has been identified as a binding constraint to meet energy demand.<sup>3</sup>
- » Pico-solar systems through PayGo have become cheaper than the traditional lighting sources and offer a cleaner alternative for bottom-of-the-pyramid consumers.<sup>4</sup> Without them, millions of people rely on kerosene lanterns, candles or torches to light their homes and are unable to power appliances.<sup>5</sup>
- » The World Bank estimates that the PayGo business model would allow an additional 200 million people in SSA to afford a Tier 1 off-grid solar system and thus gain energy access.<sup>6</sup>

### **PayGo drives financial inclusion:**

- » In Sub-Saharan Africa, 57% of adults are unbanked and excluded from the financial system. The majority are female and less than 2% of them can rely on government social transfers.<sup>7</sup>
- » PayGo allows low income populations with little to no access to credit or savings to access energy through off-grid products that are paid in small installments over time. Bottom-of-the-pyramid households are thus able to overcome the high up-front costs of solar assets and access clean and reliable electricity.
- » Because PayGo solar systems are often integrated with mobile money, demand for off-grid energy can encourage mobile money adoption, leading to a virtuous cycle of financial inclusion. In Uganda, 16 percent of off-grid solar PayGo customers used mobile money for the first time as a result of purchasing their solar product.<sup>8</sup> Mobile money is essential for mobile or displaced populations as well as countries with limited banking sector (i.e. Somalia).<sup>9</sup>

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### By the Numbers:

# 25-30

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# 200

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# 40%

OF TOTAL OFF-GRID SOLAR LIGHTING SALES THROUGH PAYGO IN SSA

» By increasing the value of transactions through mobile money and making regular repayments, PayGo customers develop credit histories. The resulting credit rating together with a source of collateral (i.e. the solar home system) can be used to purchase other financed assets.<sup>10</sup>

### PayGo creates economic opportunities and drives social impact:

- » PayGo boosts affordability, unlocking larger plug-and-play systems that provide customers with energy access levels of Tier 1 and greater, crucial for achieving Sustainable Development Goal (SDG) 7.<sup>11</sup>
- » Most PayGo providers offer additional products and services, like agricultural equipment, under the same model to the credit worthy customers which increases their productivity and helps them succeed in their businesses.<sup>12</sup>
- » The cost-effective flexibility of making small repayments also makes PayGo a promising model for consumers with unpredictable incomes.<sup>13</sup>
- » Mobile money use, mostly driven by PayGo technologies, has lifted 2% of households out of poverty in Kenya according to a recent article published in Science Magazine. In addition, it has improved labor market outcomes for women, who have moved out of agriculture and into business.<sup>14</sup>

### Share the Message

- » PayGo helps bottom-of-the-pyramid households overcome the high up-front costs of solar assets and access clean and reliable energy.
- » More than 40% of all sales of off-grid solar lighting products in SSA are conducted through PayGo.
- » PayGo drives financial inclusion by offering credit to bottom-of-the-pyramid households

### Sources:

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10. [IFC \(2020\), "Off-grid Solar Market Trends Report 2020." March 2020. International Finance Corporation.](#)
11. [Ibid](#)
12. [Power for All has studied the effects of an appliance finance program in Nyenye, Uganda, and found substantial increases in income for business owners after appliance deployment.](#)

13. [Waldron and Faz \(2016\), "Digitally financed energy: How off-grid solar providers leverage digital payments and drive financial inclusion."](#)

14. [Suri and Jack \(2016\), "The long-run poverty and gender impacts of mobile money."](#)